

**REMARKS**

Claims 40, 46, 47, 49-51, and 53-54 are pending after this amendment and claims 39, 52 and 55 have been canceled without prejudice. Applicants expressly reserve the right to pursue the canceled subject matter in this application or subsequent applications that claim the benefit of this application.

Applicants have amended claim 40 to make it independent and to recite "isolated." Support for this amendment can be found, for example, at Example 1 on pages 33-46.

Applicants have amended claims 40 and 46 to recite the CDRs of antibody 3B10. Support for this amendment can be found, for example, at page 16, lines 20-29.

Applicants have amended claim 47 to recite the heavy and light chain variable domain sequences of antibody 3B10 and to dependent from claim 46. Support for this amendment can be found, for example, at page 16, lines 20-29.

Applicants have amended claims 46, 49-51 and 53-54 to depend from claim 40.

No new matter has been introduced. Applicants respectfully request reconsideration in view of the following remarks. The Examiner's rejections and comments are addressed below in the order they were raised in the Office Action.

**DETAILED ACTION**

Applicants note with appreciation that the response filed September 18, 2008 has been entered.

**Claim Rejections under 35 U.S.C. § 112, first paragraph**

1. The Examiner has rejected claims 40, 46, 47 and 52 as allegedly containing subject matter which was not described in such a way as to reasonably convey to one skilled in the art that the applicant was in possession of the claimed invention. Specifically, the Examiner argues that

without all of the relevant CDRs, the skilled artisan cannot envision the detailed structure of the full scope of the encompassed polypeptides as are claimed.

Applicants respectfully disagree. However, in an effort to expedite prosecution of the application, the claims have been amended obviating the rejection. In particular, the claims have been amended to recite the CDRs of antibody 3B10. Reconsideration and withdrawal of this rejection are respectfully requested.

2. The Examiner has objected to the specification as allegedly failing to provide an adequate written description and failing to provide an enabling disclosure. The Examiner argues that the specification does not provide evidence that the claimed biological materials are (1) known; (2) reproducible from the written description; or (3) deposited in compliance with the criteria set forth in 37 CFR §§ 1.801-1.809. Specifically, the claim allegedly requires the 3B10, 4B2, 10, 17, 24, 25, 26, 27, 31, 41, 50, 60, 87, 3-4A, and 3-11F antibodies.

Applicants request that this objection be held in abeyance. An acceptable deposit of the hybridomas will be made complying with all the proper conditions, assurances, and corroborations to satisfy the criteria set forth in 37 CFR §§ 1.801-1.809 within the required time.

3. The Examiner has rejected claims 39, 40, 46, 47, 49, 50, 51, 53 and 54 as allegedly containing subject matter which was not described in such a way as to enable one skilled in the art to make and/or use the invention. Specifically, the Examiner argues that it would seem entirely unknown and unpredictable that antibodies capable of neutralizing "signal transduction activities" were obtainable.

Applicants respectfully disagree. However, solely to expedite prosecution, applicants have canceled claim 39 rendering the rejection moot to that claim. The remaining claim do not recite inhibition of selected cellular responses induced by PTN. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections under 35 U.S.C. § 112, second paragraph

4. Claims 39, 40, 46, 47, 49, 50, 51, 53, 54 and 55 are rejected under 35 U.S.C. § 112, second paragraph for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. The Examiner alleges that in claim 39, and claims dependent thereupon, it is not clear what applicant intends as encompassed by a "signaling transduction activities".

Applicants respectfully disagree. However, solely to expedite prosecution, applicants have canceled claim 39 rendering the rejection moot.

5. The Examiner alleges that claim 40 is vague in the absence of recitation of deposit accession numbers to clearly identify the claimed antibody/hybridoma species and it is unclear what is within the metes and bounds of the invention because it is not clear what applicant intends as encompassed by "substantially" the same epitope. Applicants respectfully traverse.

Applicants request that the recitation of deposit accession number be held in abeyance as discussed *supra*. An acceptable deposit will be made before the date of payment of the issue fee.

With regards to the term "substantially" applicants respectfully disagree. None the less, solely to expedite prosecution, applicants have removed the word "substantially" rendering the rejection moot.

6. The Examiner states that in claim 55, "PTN protein" should be defined on first presentation. Applicants have canceled claim 55 rendering the rejection moot.

#### Rejections under 35 U.S.C. § 103(a)

7. Claims 39, 40, 46, 49, 50, 53, 54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jäger et al. (Int. J. Cancer 73: 537, 1997), Rauvala (EMBO J. 8:2933), Ledoux et al. (J. Histochem. Cytochem. 45: 1239, 1997), Harlow et al., Knight (US 5,675,063), Czubyko et al. (J. Biol. Chem. 269: 21358, 1994). Jäger et al. allegedly teach a polyclonal antibody to PTN, raised in rabbits by the methods of Rauvala, which inhibits the biological activity of the protein. As taught by Rauvala, the antibody was raised by immunization with the N-terminal peptide of PTN. Ledoux et al. allegedly teach polyclonal antibodies to PTN raised in rabbits. Harlow et al. allegedly teach that, once the sequence of a protein is known, it is routine and conventional in the art to elicit antibodies to peptides and/or fusion proteins derived from the protein and/or to prepare a bank of site-specific monoclonal antibodies for a variety of uses. Harlow et al. further allegedly teach rationales for the selection of synthetic peptides as immunogens. Knight allegedly teaches the 240E

cell line as a fusion partner generally for producing rabbit monoclonal antibodies to a predetermined immunogen. Czubayko et al. allegedly desire antibodies as a specific drug for blocking the growth factor activity of PTN. The Examiner argues that one of ordinary skill in the art would have had a reasonable expectation of success and obvious motivation for generating monoclonal antibodies reactive with PTN for use as blocking agents in view of the cited references.

Applicants respectfully disagree. However, solely to expedite prosecution, applicants have canceled claim 39 rendering the rejection moot. The remaining claims recite the CDRs of antibody 3B10. None of the cited references teach or suggest the amino acid sequences of the CDRs of antibody 3B10. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

8. Claims 39, 40, 46, 49, 50, 53, 54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jäger et al. (Int. J. Cancer 73: 537, 1997), Rauvala (EMBO J. 8:2933), Ledoux et al. (J. Histochem. Cytochem. 45: 1239, 1997), Harlow et al., Roes et al. (J. Immunol. Meth. 183:231-237, 1995), Amet et al. (Mol. Cell. Neurosci. 17: 1014, 2001), Czubayko et al. (J. Biol. Chem. 269: 21358, 1994). Roes et al. allegedly disclose immunization of knockout mice with the knockout gene product for production of monoclonal antibodies. Amet et al. allegedly disclose PTN knockout mice.

Applicants respectfully disagree. However, solely to expedite prosecution, applicants have canceled claim 39 rendering the rejection moot. The remaining claims recite the CDRs of antibody 3B10. None of the cited references teach or suggest the amino acid sequences of the CDRs of antibody 3B10. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

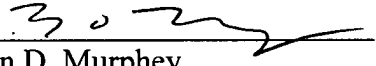
**CONCLUSION**

In view of the foregoing amendments and remarks, Applicants submit that the pending claims are in condition for allowance. Early and favorable reconsideration is respectfully solicited.

The Examiner may address any questions raised by this submission to the undersigned at 617-951-7000. Applicants believe no additional fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-1945, under Order No. GUH-026-101 from which the undersigned is authorized to draw.

Dated: January 7, 2010

Respectfully submitted,

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